**Chapter 3: Equation Writing Drill: Write equations for the following**

**Answer keys (Please note that physical states are not specified here, but on your exams, you must specify them!!! Don’t worry, they are probably given to you.)**

1. Sodium phosphate + Aluminum nitrate

Na3PO4 + Al(NO3) 3 3NaNO3 + AlPO4

1. Aluminum + Lead (II) nitrate

2Al + 3Pb(NO3) 2 2Al(NO3) 3 + 3Pb

1. Decomposition of potassium bromide

2KBr 2K + Br2

1. Synthesis of sodium bromide

2Na + Br2 2NaBr

1. Calcium + water

Ca + H2O Ca(OH) 2 + H2

1. Fluorine + potassium chloride

F2 + 2KCl 2KF + Cl2

1. Decomposition of phosphorus (V) sulfide

P2S5 2P + 5S

1. Iron (III) chloride + Calcium sulfate

2FeCl3 +3 CaSO4 Fe2 (SO4) 3 + 3CaCl2

1. Sodium chlorate Sodium chloride + Oxygen

2NaClO3 2NaCl + 3O2

1. P2O5+ H2O H3PO4 (formulas are correct- balance)

P2O5+ 3H2O 2H3PO4

1. N2 + H2 NH3

N2 + 3H2 2NH3

1. AgNO3 + MgCl2 AgCl + Mg(NO3) 2

2AgNO3 + MgCl2 2AgCl + Mg(NO3) 2

1. FeCl3 + NaOH Fe(OH) 3 + NaCl

FeCl3 + 3NaOH Fe(OH) 3 + 3NaCl

1. HCl+ CaCO3 CaCl2 + H2O + CO2

2HCl+ CaCO3 CaCl2 + H2O + CO2